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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/894,036	06/28/2001	Masachika Takata	P/1071-1395	5499

32172 7590 11/14/2003

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EXAMINER

YOON, TAE H

ART UNIT

PAPER NUMBER

1714

DATE MAILED: 11/14/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/894,036

Applicant(s)

TAKATA ET AL.

Examiner

Tae H Yoon

Art Unit

1714

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 October 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) 19 and 20 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Applicant's election with traverse of Group I is acknowledged. The traversal is on the ground(s) that the method claims of Group II do include emulsion polymerization and the entire search area has not been identified. This is not found persuasive because the claim 19 recites a particular pressure for obtaining a water-soluble acrylic binder and such pressure is not used in emulsion polymerization, and applicant failed to show otherwise. The specification recites solution polymerization with the recited pressure. Also, the product of Group I can be obtained by polymerization of a binder precursor in the presence of a ceramic raw material or emulsion polymerization under a standard atmosphere.

The search for group I is 524/413, 401 and 833 and the further search for group II would be 523/347, 333, 334, and 526/318.4, 318.41, 318.44.

The requirement is still deemed proper and is therefore made FINAL.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless —

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-8 and 10-18 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Hessel et al (WO 94/07808).

Rejection is maintained for reason of record and following response.

Applicant assertion with respect to the ceramic slurry having a lower viscosity and an amount of solvent and the ceramic green sheet having good mechanical properties has little probative value since none of said (or particular) properties are recited in the claims.

Applicant asserts that acrylic emulsion copolymers frequently have molecular weights of 1,000,000 or more has little probative value and applicant failed to show that examples (Beispiel) on pages 6 and 8 of Hessel et al do not yield the instant molecular weights. Also, copolymers of Hessel et al encompass any molecular weight since Hessel et al do not specify molecular weight but viscosity measurement in said examples (Beispiel). Applicant also asserts that copolymer of Hessel et al is not water-soluble since it is in the form of microbeads, but the examiner disagrees with such assertion since copolymers of Hessel et al comprises the same monomers and amounts thereof as in the instant invention. Besides, any particular value of water solubility is not recited and the instant claim 3 recites the use of up to 99 wt% of a hydrophobic monomer (its homopolymer is non-water soluble) and thus the meaning of the recited "water-soluble" does not include a solution, and a copolymer having any water solubility even in a minute portion meets the recited water-soluble acrylic binder. The instantly recited aggregated molecules would be particles or beads and applicant failed to show that copolymer of Hessel et al is not water-soluble.

Claims 1-18 are rejected under 35 U.S.C. 103(a) as obvious over Hessel et al (WO 94/07808) in view of Miyazaki et al (JP 11-268959) and further in view of Sambrook et al (US 5,772,953) or Masaki et al (US 6,004,705).

Rejection is maintained for reason of record and above.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tae H Yoon whose telephone number is (703) 308-2389. The examiner can normally be reached on Mon-Thu.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on (703) 306-2777. The fax phone numbers for the organization where this application or proceeding is assigned are (703)

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872-9310 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.



Tae H Yoon
Primary Examiner
Art Unit 1714

THY
November 7, 2003